IMPLEMENTATION SCHEDULE

The Implementation Schedule that follows describes recovery task priorities, task numbers, task descriptions, duration of tasks, potential or participating responsible parties, total cost estimate and estimates for the next 5 years, if available, and comments. These tasks, when accomplished, are expected to lead to recovery of bull trout in the Saint Mary - Belly River Recovery Unit. Costs estimates are not provided for tasks which are normal agency responsibility under existing authorities.

Parties with authority, responsibility, or expressed interest to implement a specific recovery task are identified in the Implementation Schedule. Listing a responsible party does not imply that prior approval has been given or require that party to participate or expend any funds. However, willing participants may be able to increase their funding opportunities by demonstrating that their budget submission or funding request is for a recovery task identified in an approved recovery plan, and is therefore part of a coordinated effort to recover bull trout. In addition, section 7 (a)(1) of the Endangered Species Act directs all Federal agencies to use their authorities to further the purposes of the Endangered Species Act by implementing programs for the conservation of threatened or endangered species.

The following are definitions to column headings in the Implementation Schedule:

<u>Priority Number</u>: All priority 1 tasks are listed first, followed by priority 2 and priority 3 tasks.

Priority 1: All actions that must be taken to prevent extinction or to prevent the species from declining irreversibly in the foreseeable future.

Priority 2: All actions that must be taken to prevent a significant decline in species population, habitat quality, or some other significant negative effect short of extinction.

Priority 3: All other actions necessary to provide for full recovery (or reclassification) of the species.

<u>Task Number and Task Description</u>: Recovery tasks are numbered as in the recovery outline. Refer to the action narrative for task descriptions.

<u>Task Duration</u>: Expected number of years to complete the corresponding task. Study designs can incorporate more than one task, which when combined, may reduce the time needed for task completion.

<u>Responsible or Participating Party</u>: Federal, State, Native American Tribes, non-governmental organizations, or universities with responsibility or capability to fund, authorize or carry out the corresponding recovery task. **Bolding** indicates agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility. Identified parties include:

ACA Alberta Conservation Association

ASRD Alberta Sustainable Resource Development

BFN Blackfeet Nation

BIA Bureau of Indian Affairs
Glacier Co. Glacier County, Montana
NPS National Park Service

USBR U.S. Bureau of Reclamation

USDOT U.S. Department of Transportation USFWS U.S. Fish and Wildlife Service

USEPA U.S. Environmental Protection Agency

Many of the tasks necessary for bull trout recovery are related to restoration of the watershed(s), and are currently being implemented to some degree through existing programs and mandates. However, current implementation is typically being carried out at limited funding levels and/or in only a portion of the watershed, and will need to be expanded to result in measurable gains toward the bull trout recovery goal and objectives. Bold font indicates agency or agencies that have the lead role for task implementation and coordination, though not necessarily sole responsibility.

<u>Cost Estimates</u>: Cost estimates are rough approximations and provided only for general guidance. Total costs are estimated for the duration of the task, are itemized annually for

the next five years, and includes estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals.

An asterisk (*) in the total cost column indicates ongoing tasks that are currently being implemented as part of normal agency responsibilities under existing authorities. Because these tasks are not being done specifically or solely for bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

Double asterisk (**) in the total cost column indicates that estimated costs for these tasks are not determinable at this time. Input is requested to help develop reasonable cost estimates for these tasks.

Triple asterisk (***) indicates costs are combined with or embedded within other related tasks.

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	In	nplementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	r Reco	very U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments
number	number	-	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.1.1	Reduce general sediment sources	25	BFN, BIA, NPS, USEPA, ASRD, Glacier Co., USDOT, USFWS	*						Ongoing ²
1	1.1.2	Implement Divide Creek restoration actions	10	BIA, NPS, USEPA, USDOT	10,000	1000	1000	1000	1000	1000	Ongoing
1	1.2.1	Eliminate entrainment in diversions	25	ASRD, BFN, BIA, USBR, NPS, USFWS	5,000	50	50	50	50	50	Ongoing
1	1.2.2	Provide fish passage around diversions	25	ASRD, BFN, BIA, USBR, NPS, USFWS	1,250	50	50	50	50	50	Ongoing

²Ongoing tasks are currently being implemented as part of normal agency responsibilities that may benefit bull trout. Because these actions are not specifically being done to address bull trout conservation, they are not included in the cost estimates. Some of these efforts may be occurring at reduced funding levels and/or in only a small portion of the watershed.

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	In	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	r Reco	very U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments
number	number	,	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	1.2.4	Improve instream flows	25	ASRD, BFN, BIA, USBR, NPS, USFWS	*						Ongoing
1	1.4.1	Optimize outflow patterns from Sherburne Dam	25	BFN, BIA, USBR, NPS, USEPA, USFWS	*						Ongoing through section 7 consultation
1	1.4.3	Provide flushing flows	25	BFN, BIA, USBR, NPS, USEPA, USFWS	*						Ongoing through section 7 consultation
1	3.2.5	Develop alternative method of commercial lake whitefish capture	5	BFN, USFWS	50	10	10	10	10	10	Fishery management cost
1	3.2.6	Coordinate with Alberta	25	ACA, ASRD, USFWS	250	10	10	10	10	10	Ongoing
1	4.2.1	Maintain connectivity with Alberta	25	ACA, ASRD, BFN USFWS	250	10	10	10	10	10	Ongoing

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	In	plementation Sch	edule for t	the bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	overy (Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number	Î	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
1	5.2.2	Evaluate effects of entrainment losses on population status	10	ASRD, BFN, USBR, USFWS	1,000	100	100	100	100	100	See related task 1.2.1
2	1.1.3	Upgrade problem roads	25	ASRD, BFN, BIA, Glacier Co., NPS, USDOT	*						Ongoing administrative and planning costs
2	1.1.4	Develop and implement a basinwide Total Maximum Daily Load program.	25	BFN, BIA, USBR, NPS, USEPA, ASRD, Glacier Co., USFWS	*						Ongoing Clean Water Act activity
2	1.1.5	Support habitat protection and monitoring in Alberta	25	ACA, ASRD, USFWS, BFN, BIA, NPS	1,250	50	50	50	50	50	Ongoing

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	In	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	overy (Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.2.3	Eliminate culvert barriers	25	BFN, BIA, USBR, Glacier Co., NPS, ASRD, USDOT, USFWS	1,250	50	50	50	50	50	Ongoing
2	1.3.1	Conduct watershed problem assessments	10	ASRD, ACA, BFN NPS, USFWS	*						Ongoing management and administrative costs
2	1.3.2	Revegetate denuded riparian areas	25	ASRD, BFN, BIA, USBR	250	10	10	10	10	10	Ongoing
2	1.3.3	Improve grazing practices	25	ASRD, BFN, BIA,	*						Ongoing administrative and planning costs
2	1.3.4	Restore stream channels	25	ASRD, BFN, BIA, USBR, NPS	***						See related task 1.3.1
2	1.3.5	Improve instream habitat	25	ASRD, BFN, BIA, USBR, NPS	***						See related task 1.3.1

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	In	plementation Sch	edule for t	the bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	overy U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number	,	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	1.3.6	Minimize potential stream channel degradation	25	ASRD, BFN, BIA, USBR, Glacier Co., NPS, USDOT, USEPA, USFWS	*						Ongoing management and administrative costs
2	1.4.2	Establish and restore natural thermal regime	25	BFN, BIA, USBR, NPS, USEPA, USFWS	*						Ongoing, in part, through Section 7 consultation
2	2.1.1	Update fish hatchery and stocking practices	25	ASRD, BFN, USFWS	*						Ongoing fishery management costs
2	2.3.1	Discourage unauthorized fish introductions	25	ACA, ASRD, BFN, NPS, USFWS	*						Ongoing fishery management costs
2	2.3.2	Develop bull trout education program	25	ASRD, BFN, NPS, USFWS	250	10	10	10	10	10	Part of broader programs

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	Im	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	very (Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	2.4.1	Evaluate experimental removal of established brook trout populations	25	ASRD, BFN, NPS, USFWS	1,250	50	50	50	50	50	Ongoing fishery management costs, see related tasks 2.5.1, 3.3.1, 3.4.2
2	2.5.1	Implement nonnative fish control	25	ASRD, BFN, NPS, USFWS	*						Ongoing fishery management costs, see related tasks 2.4.1, 3.3.1, 3.4.2
2	3.2.3	Implement angler education efforts	25	ASRD, BFN, NPS, USFWS	*						Ongoing fishery management costs; see related tasks 3.2.1, 3.2.2, 3.4.1, 3.4.2
2	3.2.4	Solicit information from commercial fishermen	10	BFN, USFWS	*						Ongoing fishery management cost

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	In	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	r Reco	very U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000))		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	3.3.1	Evaluate site specific conflicts with introduced sport fish	10	ACA, ASRD, BFN, NPS, USFWS	1,000	100	100	100	100	100	Ongoing
2	3.4.2	Increase harvest of competing species	25	ASRD, BFN, NPS, USFWS	*						Ongoing fishery management costs; see related tasks 2.4.1, 2.5.1, 3.2.1, 3.2.2, 3.2.3, 3.4.1
2	4.1.1	Conduct genetic inventory	10	ACA, ASRD, NPS, USFWS	*						Ongoing fishery management cost
2	5.1.1	Institute annual redd counts in index reaches	25	ASRD, BFN, NPS, USFWS, USBR	250	10	10	10	10	10	Ongoing
2	5.2.1	Delineate important migratory habitat	10	ASRD, BFN, NPS, USFWS, USBR	1,000	100	100	100	100	100	Ongoing

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	In	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	very U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number	Î	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	5.2.3	Assess Saint Mary Reservoir	10	ASRD	*						
2	5.2.4	Evaluate temperature as a limiting factor	25	ASRD, ACA, BFN NPS, USFWS	1,250	50	50	50	50	50	See related task 1.3.1
2	5.2.5	Identify suitable unoccupied habitat	5	ACA, ASRD, BFN NPS, USFWS	***						See related task 5.2.1
2	5.5.2	Finalize list of local populations and prioritize key watersheds for recovery actions	5	ASRD, BFN, NPS, USFWS	***						Ongoing fishery management cost; see related tasks 5.2.1, 5.5.3, and 5.5.4
2	6.1.1	Support watershed group restoration efforts	25	ASRD, BFN, BIA, USBR, Glacier Co., NPS, USEPA, USFWS	*						Ongoing administrative and CWA costs; see related 1.1.2, 1.3.1, and 1.3.6

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	In	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bel	ly Rive	er Reco	overy U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number	•	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
2	6.1.2	Protect habitat	25	ASRD, BFN, BIA, USBR, Glacier Co., NPS, USFWS	*						Ongoing through agency mandates
2	6.2.1	Coordinate all recovery actions with appropriate Alberta partners.	25	ASRD, BFN, BIA, USBR, NPS, USFWS	1,250	50	50	50	50	50	Ongoing
2	6.3.1	Encourage floodplain protection	25	ASRD, BFN, BIA, USBR, Glacier Co., NPS, USEPA, USFWS	*						Ongoing administrative and planning costs
3	1.5.1	Monitor and mitigate fire effects, where necessary	25	ASRD, BFN, BIA, NPS	*						Ongoing administrative and planning costs
3	2.1.2	Renovate Flattop Lake	1	BFN, USFWS	10	10					Ongoing fishery management costs
3	3.1.1	Implement adaptive management	25	ASRD, BFN, NPS, USFWS, USBR	*						Ongoing fishery management costs

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	Im	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bel	ly Rive	er Reco	overy (Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	s (\$1,000)		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	3.2.1	Minimize unintentional bull trout mortality	25	ASRD, BFN, NPS, USFWS	*						Ongoing fishery management costs
3	3.2.2	Evaluate enforcement of angling regulations and evaluate/review scientific research	25	ASRD, BFN, NPS, USFWS	***						Ongoing fishery management costs; see related tasks 3.2.1, 3.2.3, 3.4.1, 3.4.2
3	3.4.1	Evaluate opportunities for regulated bull trout fisheries	25	ASRD, BFN, NPS, USFWS	***						Ongoing fishery management costs; see related tasks 2.4.1, 2.5.1, 3.2.1, 3.2.2, 3.2.3, 3.4.2
3	5.2.6	Evaluate species interaction with native lake trout and northern pike	10	ASRD, BFN, NPS, USFWS	*						Ongoing fishery management cost

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	Im	plementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	overy (Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number		duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	5.3.1	Evaluate juvenile habitat in unstable systems	10	ASRD, BFN, NPS, USFWS, USBR	*						Ongoing fishery management cost
3	5.3.2	Mitigate impacts of oil and gas exploration	25	ASRD, BFN, BIA, NPS, USEPA, USFWS	**						
3	5.4.1	Conduct wild fish health survey	5	ASRD, NPS, USFWS	250	50	50	50	50	50	Ongoing fishery management costs
3	5.5.1	Research historical distribution and abundance	5	ASRD, BFN, NPS, USFWS	50	10	10	10	10	10	
3	5.5.3	Map spawning habitat	25	ASRD, BFN, NPS, USFWS, USBR	*						Ongoing fishery management costs; see related tasks 5.2.1, 5.5.2, and 5.5.4

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	In	nplementation Sch	edule for t	he bull trout recovery	plan: Sair	nt Mary	y - Bell	ly Rive	er Reco	overy U	Jnit
Priority	Task	Task description	Task	Responsible parties		Cost	estimates	(\$1,000)		Comments
number	number	•	duration (years)	(Alphabetical)	Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	5.5.4	Evaluate resident populations	10	ASRD, BFN, NPS, USFWS	***						Ongoing fishery management costs; see related task 5.5.2 and 5.5.5
3	5.5.5	Evaluate distribution, abundance, and habitat use by bull trout occupying the Saint Mary lakes	25	BFN, NPS, USFWS	***						Ongoing fishery management costs; see related task 5.5.2 and 5.5.4
3	5.6.1	Conduct research on Cracker Lake Core Area	10	NPS, USFWS	*						
3	5.6.2	Evaluate Glenns and Cosley lakes	5	NPS, USFWS	10	10					Ongoing fishery management cost

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Implementation Schedule for the bull trout recovery plan: Saint Mary - Belly River Recovery Unit											
Priority number	Task number	Task description	Task duration (years)	Responsible parties (Alphabetical)	Cost estimates (\$1,000)						Comments
					Total cost	Year 1	Year 2	Year 3	Year 4	Year 5	
3	7.3.1	Periodically review progress towards recovery goals and assess recovery task priorities	25	ASRD, BFN, BIA, NPS, USFWS	*						No added cost